REMARKS

Claims 1-7, 12, 15 and 16 stand rejected. Claim 1 has been amended while claim 15 has been cancelled herein. Therefore, Claims 1-7, 12 and 16 are pending and at issue. Applicants respectfully request reconsideration of the rejections of the claims in view of the arguments and amendments presented herein.

As an initial matter, this Amendment is being submitted after final. However, claim 1 has been amended to include the subject matter of claim 15, which has been cancelled herein. No further searching is required by the Examiner as the claim amended subject matter has already been considered by the Examiner. Therefore, Applicants respectfully request entry of the present Amendment.

Claims 1-4 and 12 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Stevenson et al. and Kawamura and Aanstoos et al. However, claim 1 has been amended to include the features of dependent claim 15. Therefore, this rejection should be withdrawn.

In view of the above noted amendment of independent claim 1, the rejection of claim 15 will now be discussed with reference to claim 1. Claim 15 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Stevenson et al., Kawamura and Aanstoos, and further in view of Leijon. Claim 15 has been cancelled. This rejection, as applied to amended claim 1, should be withdrawn and the claims allowed.

The present application provides a system through which the flywheel in a vehicle driving system is capable of solving the problem of operating alternatively at a very low voltage

level and at a very high voltage level, the high voltage level being more than 20 times greater than the low voltage level.

Stevenson and Aanstoos both teach a system where the flywheel can be charged/discharged at only one level. Furthermore, Stevenson is silent about the voltage, whereas Aanstoos teaches a level about 7 to 10 kV. Neither of Stevenson nor Aanstoos teach the operating at two alternative levels.

To overcome this deficiency, the Office Action alleges that this gap in the teaching is filled by Kawamura. However, Kawamura does not relate to a machine that both can be charged or discharged with electrical energy. Kawamura solely describes a generator. Although the generator can supply power at two different levels, Kawamura does not provide any teaching how to modify Stevenson or Aanstoos such that the respective flywheel can be charged at two very different voltages.

To improve Stevenson or Aanstoos in that respect, without exercising inventive skill, would require far more than the knowledge of a generator with two windings delivering the power at two slightly different voltage levels.

It is in this context also worth noting that the two voltage levels of Kawamura differ from each other by a factor less than 4, when comparing the upper range limit of the lower level and the lower range limit of the upper level, whereas the voltage levels according to the present application has a corresponding relation where the higher level is at least 20 times as great as the lower level.

As mentioned above, the teaching of Kawamura would not lead the skilled person to modify Stevenson such that it can supply and discharge at two different levels. Even so it would

not be obvious to provide the levels at such a great difference as in the present invention. A factor of 20 times in comparison with a factor of 4 times represent not merely a quantitative adaption to meet various power requirements but is a qualitatively different arrangement.

Furthermore, claim 1 as amended is further distinguished from the combined teaching of Stevenson, Kawamura and Aanstoos by the specific features of the windings. While Leijon discusses various types of winding, it is not known or understood in a flywheel-generator/motor context. It would require inventive skill to understand the particular advantages gained when providing such kind of winding in a system according to the present invention.

Claims 5, 6, 7 and 16 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Stevenson et al., Kawamura and Aanstoos and further in view of references including Tanaka, Ueyama et al. and Smith et al. As discussed above regarding the rejection of claim 1 as amended, the combination of Stevenson et al., Kawamura and Aanstoos with Leijon fails to disclose or suggest one or more features recited in the claim. Claims 5, 6, 7 and 16 depend from and more specifically recite the features of amended claim 1. Further, each of Tanaka, Ueyama et al. and Smith et al., taken alone or in combination with Stevenson et al., Kawamura, Aanstoos and Leijon similarly fails to disclose or suggest these features. Therefore, these rejections should be withdrawn and the claims allowed.

CONCLUSION

Should any formalities remain which may be addressed by Examiner amendments, the examiner is requested to contact by phone the undersigned attorney to expedite the prosecution of the present application.

Respectfully submitted,

By _____

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